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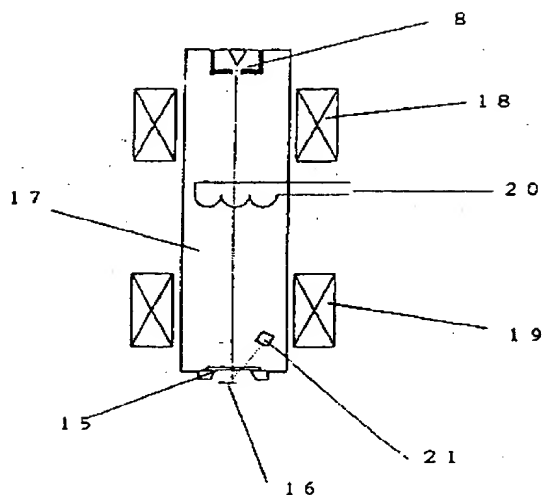
APPLICATION DATE : 18-11-88
APPLICATION NUMBER : 63291885

APPLICANT : NIKON CORP;

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TITLE : ELECTRON BEAM TRANSMISSION WINDOW



ABSTRACT : PURPOSE: To make it possible to sufficiently correspond to a specimen impossible of being directly exposed in vacuum and observe the fine structure of an organism in a live condition by having a electron beam transmission film of self- support which makes carbon a main component.

CONSTITUTION: The window material of an electron beam permeation film is an electron beam permeation of self-support which makes carbon a main component, particularly a diamond-like carbon film and a diamond film are used. In this case, an electron beam shot from an electron gun 8 is irradiated on a specimen 16 through the electron beam transmission film 15 by a focusing lens 18, a scanning coil 20 and a projection lens 19. The electron beam reflected from the specimen enters in the inside of a vacuum vessel 17 through the electron beam transmission window 15 again and detected by a detector 21. As a result, it is possible to sufficiently correspond to the specimen impossible of being directly exposed in vacuum and the fine structure of an organism can be observed in a live condition.

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